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S/N: 10/708,147

In the Claims

What is claimed is:

1. (Currently Amended) An lifting apparatus comprising:
a support bar extendable across and connectable to a frame;
a power actuator connected to the support bar;
an extendable bar pivotally connected to the ~~support bar~~ power actuator; and
a guide bar having a ramp and constructed to engage the extendable bar, the ramp
constructed to increase a distance from the extendable bar to the guide bar during extension of the
extendable bar.
2. (Original) The apparatus of claim 1 wherein the ramp increases a rate of incline
during extension of the extendable bar.
3. (Original) The apparatus of claim 1 wherein the ramp has a flat surface mounted
to the guide bar and an arcuate surface opposite thereof.
4. (Original) The apparatus of claim 1 wherein the ramp is generally triangular
shaped.
5. (Original) The apparatus of claim 1 further comprising a first set of wheels
attached to a first end of the extendable bar and constructed to move along the guide bar.
6. (Original) The apparatus of claim 5 further comprising a second set of wheels
attached to a second end of the extendable bar and constructed to move along a planar surface
supporting the frame.
7. (Original) The apparatus of claim 6 wherein the extendable bar varies an
elevation of at least one of a head end and a foot end of the frame as the first set of wheels move
along the guide bar.
8. (Original) The apparatus of claim 7 wherein the at least one of a head end and a
foot end of the frame is elevated off the floor as the first set of wheels moves away from the
power actuator.

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9. (Original) The apparatus of claim 8 further comprising side guards connected to the frame and configured to be displaced as the elevation varies so as to prevent access to an underneath portion of the frame.

10. (Original) The apparatus of claim 1 wherein the power actuator is at least one of a mechanical, an electrical, a hydraulic, and a pneumatic device.

11. (Original) A bed comprising:
a frame;
a tilting apparatus connected to the frame and configured to lift an end of the frame, the tilting apparatus comprising:
a transverse frame bar connected to the frame;
a lifting actuator having a retractable shaft and connected to the transverse frame bar;
a pair of guide rails, each having a first end connected to the transverse frame bar and a second end connected to the frame;
a pair of pivot bars each having a first end pivotally connected to the transverse frame bar and a second end; and
a cross member link having a first end pivotally connected to the second end of each of the pivot bars and a second end in contact with each of the guide rails.

12. (Original) The bed of claim 11 wherein the lifting actuator is remotely controlled.

13. (Original) The bed of claim 11 further comprising a ramp positioned on each of the pair of guide rails to engage a respective guide wheel.

14. (Original) The bed of claim 13 wherein the ramp has an arcuate surface to engage the respective guide wheel.

15. (Original) The bed of claim 11 wherein the cross member link is connected to the retractable shaft.

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16. (Original) The bed of claim 15 wherein the retractable shaft is configured to move the cross member link between a minimum position and a maximum position along the pair of guide rails.

17. (Original) The bed of claim 16 wherein the retractable shaft is configured to restrict movement of the cross member link along the pair of guide rails when a desired inclined position is reached.

18. (Original) The bed of claim 11 wherein the frame accommodates at least one of a twin size mattress, a full size mattress, a queen size mattress, and a king size mattress.

19. (Original) The bed of claim 11 comprising no more than one tilting apparatus.

20. (Original) The bed of claim 11 further comprising an incline accelerator constructed to increase a rate of inclination as the cross member link moves thereacross.

21. (Original) A method of manufacturing a frame tilting apparatus, the method comprising the steps of:

- providing a main support bar;
- connecting an actuator having a shaft to the main support bar;
- connecting a cross member bar to the shaft, the cross member bar configured to tilt a frame as the cross member bar rotates about a first end thereof; and
- connecting a pair of rails to the main support bar, the pair of rails configured to guide a second end of the cross member bar as the cross member bar moves therealong.

22. (Original) The method of claim 21 further comprising the step of providing a pair of guide wheels connected to the second end of the cross member bar.

23. (Original) The method of claim 22 further comprising the step of providing a pair of ramps configured to receive the pair of guide wheels and configured to define a distance between the bed frame and the pair of guide wheels as the pair of guide wheels moves therealong.

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24. (Original) The method of claim 21 further comprising the step of providing guard boards configured to inhibit interference with the frame tilting apparatus or a volume defined thereby.

25. (Original) The method of claim 21 further comprising the step of providing structure to increase a rate of inclination during extension of the cross member bar.

26. (Original) A method of inclining a bed comprising:
 engaging a first end of an extendable bar to a guide bar fixedly attached to one end of a bed frame;
 engaging a second end of the extendable bar to a floor;
 extending the first end of the extendable bar such that the extendable bar rotates causing a distance between the first end of the extendable bar and the floor to increase; and
 increasing a distance between the first end of the extendable bar and the guide bar as the first end of the extendable bar moves along a ramp attached to the guide bar.

27. (Original) The method of claim 26 wherein the step of engaging the first end of the extendable bar comprises the step of actuating a power device having an extendable shaft connected to the extendable bar.

28. (Original) The method of claim 27 further comprises actuating the power device remotely.

29. (New) A lifting apparatus comprising:
 a support bar extendable across and connectable to a frame;
 a power actuator connected to the support bar;
 an extendable bar pivotally connected to the support bar;
 a guide bar having a ramp and constructed to engage the extendable bar, the ramp constructed to increase a distance from the extendable bar to the guide bar during extension of the extendable bar; and
 wherein the ramp has a flat surface mounted to the guide bar and an arcuate surface opposite thereof.

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30. (New) A lifting apparatus comprising:
- a support bar extendable across and connectable to a frame;
 - a power actuator connected to the support bar;
 - an extendable bar pivotally connected to the support bar;
 - a guide bar having a ramp and constructed to engage the extendable bar, the ramp constructed to increase a distance from the extendable bar to the guide bar during extension of the extendable bar;
 - a first set of wheels attached to a first end of the extendable bar and constructed to move along the guide bar; and
 - a second set of wheels attached to a second end of the extendable bar and constructed to move along a planar surface supporting the frame.
31. (New) The apparatus of claim 30 wherein the extendable bar varies an elevation of at least one of a head end and a foot end of the frame as the first set of wheels move along the guide bar.
32. (New) The apparatus of claim 31 wherein the at least one of a head end and a foot end of the frame is elevated off the floor as the first set of wheels moves away from the power actuator.
33. (New) The apparatus of claim 32 further comprising side guards connected to the frame and configured to be displaced as the elevation varies so as to prevent access to an underneath portion of the frame.